

ABSTRACT

A bone replacement material that can be introduced or packed into a bone defective part smoothly, reliably and safely is provided. The bone replacement material is formed into a pellet and a plurality of the pellets are packed into the bone defective part. Each pellet defined by a plurality of surfaces has a pair of opposite surfaces, in which one of the opposite surfaces is inclined with respect to the other surface at a predetermined angle. The angle is preferably in the range of 10 to 60°. Further, the bone replacement material preferably satisfies at least one of the conditions including the porosity of equal to or less than 75 % and the collapsing strength of equal to or more than 15 Mpa, and more preferably satisfies both of them. Furthermore, the volume of each pellet of the bone replacement material is in the range of 13 to 239 mm³. Moreover, the bone replacement material is formed of calcium phosphate based compound having the Ca/P ratio of 1.0 to 2.0.